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10/727,639

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EXAMINER

PARRA, OMAR S

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/727,639 | Applicant(s) PARK ET AL. | |
| | Examiner OMAR PARRA | Art Unit 2623 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 10 and its dependent claims, the applicant argues that claim teach an apparatus (i.e. a settop box) with all the characteristics and limitations previously presented. The examiner respectfully disagrees.

Claim 10 call for 'an apparatus' comprising the elements listed there; however, it does not call for a 'settop box' as argued by the applicant. Although claims have to be read in light of the specifications, the examiner can not incorporate limitations from the specifications into the claims. The claimed 'apparatus' can be anything, including the apparatus disclosed by the Monta reference, of record. Therefore, the examiner respectfully believes that the art of record still reads on claims 10-17 of the applicant's invention as claimed. For the remaining amended claims, a new ground of rejection is presented.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-9 refer back to 'the apparatus of claim 1',

where claim 1 discloses a 'settop box' comprising different units which each of them could also be construed as an 'apparatus'. For purposes of an expedited prosecution, the examiner will construe 'the apparatus of claim 1' to be the 'settop box' disclosed on claim 1. Please perform corrections as needed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims **1-9** are rejected under 35 U.S.C. 102(e) as being anticipated by Rakib et al. (hereinafter 'Rakib', Pub. No. 2004/0172658).

Regarding claims 1,3 and 8, Rakib teaches a digital settop box for controlling a digital transport stream (**Gateway 14, Figs. 3, 4A, 4B, 8; which contains settop box components, [0039] and multiple cards for connecting to different types of networks**) , comprising:

a data receiving unit being connected to a digital subscriber line port and an Ethernet port (**86 and 128, Fig. 4A or just 128, which are connected to a DSL modem input- 182, Fig. 4A or 378, Fig. 8- and to a Ethernet input - 18 and 20 Figs. 4A and 8; [0087]**) , said data receiving unit receiving signals from at least one selected

from among an asynchronous transfer mode network and an Internet protocol network **([0037]; [0049]-[0053]; [0061]-[0068]; [0087]-[0096]))**, the signals corresponding to at least one selected from among asynchronous transfer mode digital broadcasting, asynchronous transfer mode video on demand, Internet protocol mode digital broadcasting, and Internet protocol video on demand **([0037]; [0049]-[0053]; [0056]-[0059]; [0080]-[0084]; [0151]-[0153]; [0166]; [0170]-[0174]; [0184]-[0185])**, said data receiving unit an identification of the received signals by determining when the received signals are asynchronous transfer mode data, when the received signals are Internet protocol over asynchronous transfer mode data, and when the received signals are Internet protocol data, said data receiving unit transmitting information corresponding to the received signals in dependence upon the identification **(ATM, IP or IP over ATM can be received by the DSL input, therefore, it is inherent that information about the data format needs to be at least in the header of the packets for identification and for letting the system know how to treat the data)**;

an extracting unit determining when the transmitted information corresponds to a portion of a Moving Picture Experts Group transport stream and when the transmitted information corresponds to Internet protocol packet data, said extracting unit extracting valid cells from asynchronous transfer mode cells when the transmitted information includes asynchronous transfer mode cells **(158, Fig. 4A, which gets all the video packets- ATM, IP, or IP over ATM- or video data and recognizes if they are sent to video client –if they contain MPEG data- and encapsulates it in IP packets –or other type of format, ATM, etc- and send them to the routing process 86, which**

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associates the IP address to an Ethernet address and send it to the requesting device);

a transport stream forming unit receiving the extracted valid cells, modifying the extracted valid cells to form modified cells by removing a predetermined byte of head information and overhead information from the extracted valid cells, and by forming one Moving Picture Experts Group transport stream by reassembling four modified cells **(Network adapter, 30, Fig. 4A. Given that the LAN can be ATM or other type of protocol, instead of Ethernet –[0049]- ATM cells would be sent to the network adapter, and where about 4 ATM cells make up one MPEG stream packet);**

a data transforming unit transforming the Moving Picture Experts Group transport stream transmitted from said transport stream forming unit to be displayed by a video display **(246, 254 and 260, Fig. 5);** and

a processing unit reassembling asynchronous transfer mode cells, transmitting received data to said data transforming unit **(242, Fig. 5; [0191]).**

Regarding claims 2 and 7, Rakib teaches an apparatus, with the Moving Picture Experts Group transport stream corresponding to an asynchronous transfer mode Moving Picture Experts Group transport stream **(Given that the LAN can be an ATM LAN, [0049], makes the MPEG transport sent to the network adapter a ATM MPEG transport stream).**

Regarding claims 4, Rakib teaches an apparatus with said data transforming unit comprising:

a decoding unit decoding the Moving Picture Experts Group transport stream transmitted from said transport stream forming unit **(246, Fig. 5)**; and

an encoding unit encoding the Moving Picture Experts Group transport stream decoded by said decoding unit to be displayed by the video display **(260, Fig.5)**.

Regarding claim 5, Rakib teaches an apparatus further comprising:

a processing unit receiving the Internet protocol over asynchronous transfer mode data from said digital subscriber line receiving unit, said processing unit receiving the Internet protocol data from said digital subscriber line receiving unit, said processing unit extracting valid cells from the Internet protocol over asynchronous transfer mode data and the Internet protocol data received from said digital subscriber line **(128 and 86, Fig. 4A, receiving ATM and IP packets from ADSL modem input -where other protocols can be used such as IP over ATM - [0057]-[0059]. After reception, they are put into a bus from which 158 on Fig. 4A gets all the video packets- ATM, IP, or IP over ATM- or video data and recognizes if they are sent to video client –if they contain MPEG data- and encapsulates it in IP packets –or other type of format, ATM, etc- and send them to the routing process 86, which associates the IP address to an Ethernet address and send it to the requesting device)**;

said processing unit receiving the Internet protocol data from said Ethernet receiving unit and extracting valid cells from the Internet protocol data received from

said Ethernet receiving unit **(IP or Ethernet data is received from the local network devices, which depends on the type of protocol used for the LAN;[0049]; [0087]-[0096])**.

Regarding claim 6, Rakib teaches an apparatus further comprising:

a control unit determining when the valid cells extracted from the asynchronous transfer mode cells by said extracting unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and general Internet data, determining when the valid cells extracted from the Internet protocol over asynchronous transfer mode data by said processing unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and the general Internet data, and determining when the valid cells extracted from the Internet protocol data by said processing unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and the general Internet data, said control unit re-assembling the cells in dependence upon the determining, said control unit transmitting the Moving Picture Experts Group transport stream to said decoding unit, and said control unit transmitting the general Internet data to said encoding unit **(158, Fig. 4A, which gets all the video packets- ATM, IP, or IP over ATM- or video data and recognizes if they are sent to video client –if they contain MPEG data- and encapsulates it in IP packets –or other type of format, ATM, etc- and send them to the routing process 86, which associates the IP address to an Ethernet address and send it to the requesting device. By assigning a Ethernet address of a**

network adapter or of a pc, for example, identification of the data and its routing to the respective decoders or processors is performed, [0124]-[0127]; [0139]-[0141]; [0165]-[0174]; [0214]).

Claim 9 has been analyzed and rejected above in view of claims 5 and 6.

6. Claims **10-17** are rejected under 35 U.S.C. 102(e) as being anticipated by Monta et al. (hereinafter 'Monta', Patent No. 7,039,048).

Regarding claim 10, Monta teaches an apparatus comprising **(Cherrypicker multiplexer- abstract, col. 3 line 23-col. 4 line 15, where the cherrypicker controls the digital transport stream that will be received on a digital settop box- col. 15 line 15-27; col. 16 line 52-67):**

a data receiving unit being connected to at least two ports, **(Packet Switch 10 in conjunction with IP wrapper 12 receive packets of data from DSL and cable headends, satellite feeds, web broadcasting servers that serve their data through Ethernet type of interface, 28, 36 and DSL or cable interface 62, Fig. 1- col. 4 lines 35-60)**, said data receiving unit receiving signals from at least one selected from among an asynchronous transfer mode network and an Internet protocol network, the signals corresponding to at least one selected from among asynchronous transfer mode digital broadcasting, asynchronous transfer mode video on demand, Internet protocol mode digital broadcasting, and Internet protocol video on demand, said data receiving unit

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identifying the received signals by determining when the received signals are asynchronous transfer mode data, when the received signals are Internet protocol over asynchronous transfer mode data, and when the received signals are Internet protocol data, said data receiving unit transmitting information corresponding to the received signals in dependence upon the identifying (**col. 4 lines 35-60, col. 3 line 59-col. 4 line 15, col. 2 line 5-31, col. 5 lines 16- 55, where, as it is well known, metro area headends use ATM networks for transmitting packets. The type of data is determined depending on the interface the data is being received or by the headers the streams posses**);

an extracting unit determining when the transmitted information corresponds to a portion of a Moving Picture Experts Group transport stream and when the transmitted information corresponds to Internet protocol packet data, said extracting unit extracting valid cells from asynchronous transfer mode cells when the transmitted information includes asynchronous transfer mode cells (**col. 3 line 59- col. 4 line 15; col. 5 lines 29-46; col. 17 lines 1-35; col. 19 lines 8-21; col. 22 lines 38-67**);

a transport stream forming unit receiving the extracted valid cells, modifying the extracted valid cells to form modified cells, the modifying including removing a predetermined byte of head information and overhead information from the extracted valid cells, forming the Moving Picture Experts Group transport stream by reassembling the modified cells (**col. 15 line 9-col. 18 line 29; col. 19 lines 8- 33; col. 20 lines 1-24; col. 23 line 34- col. 24 line 17**); and outputting video data to be transformed and then displayed by a video display (**col. 15 lines 15-27; col. 16 lines 52-67**).

Regarding claim 11, Monta teaches an apparatus wherein the predetermined information including a predetermined byte of head information and overhead information (**col. 19 lines 8-54; col. 23 line 60 -col. 24 line 16**).

Regarding claims 12 and 13, Monta teaches an apparatus with at least two ports including subscriber line port and an Ethernet port (**Packet Switch 10 in conjunction with IP wrapper 12 receive packets of data from DSL and cable headends, satellite feeds, web broadcasting servers that serve their data through Ethernet type of interface, 28, 36 and DSL or cable interface 62, Fig. 1- col. 4 lines 35-60**)..

Regarding claims 14 and 17, Monta teaches an apparatus further comprising:
a data transforming unit further performing transforming after said transport stream forming unit outputs the video data (**settop box, col. 15 lines 15-27; col. 16 lines 52-67**), said data transforming unit comprising: comprising:

a decoding unit decoding the Moving Picture Experts Group transport stream transmitted from said transport stream forming unit; and an encoding unit encoding the Moving Picture Experts Group transport stream decoded by said decoding unit to be displayed by the video display (**It is inherent that every settop box that is capable of receiving MPEG transport streams is able to decode and encode it for consequent video content display at any display**).

Regarding claim 15, Monta teaches an apparatus further comprising:

a processing unit receiving the Internet protocol over asynchronous transfer mode data from said digital subscriber line receiving unit, said processing unit receiving the Internet protocol data from said digital subscriber line receiving unit, said processing unit extracting valid cells from the Internet protocol over asynchronous transfer mode data and the Internet protocol data received from said digital subscriber line; said processing unit receiving the Internet protocol data from said Ethernet receiving unit and extracting valid cells from the Internet protocol data received from said Ethernet receiving unit (**col. 3 line 59- col. 4 line 15; col. 5 lines 29-46; col. 17 lines 1-35; col. 19 lines 8-21; col. 22 lines 38-67**).

Regarding claim 16, Monta teaches an apparatus further comprising:

a control unit determining when the valid cells extracted from the asynchronous transfer mode cells by said extracting unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and general Internet data, determining when the valid cells extracted from the Internet protocol over asynchronous transfer mode data by said processing unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and the general Internet data, and determining when the valid cells extracted from the Internet protocol data by said processing unit correspond to at least one selected from among the Moving Picture Experts Group transport stream and the general Internet data, said control unit re-assembling the cells in dependence upon the determining, said control unit transmitting

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the Moving Picture Experts Group transport stream to said decoding unit, and said control unit transmitting the general Internet data to said encoding unit (**col. 22 line 39-col. 23 line 32**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR PARRA whose telephone number is (571)270-1449. The examiner can normally be reached on 9-6 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OP

/Christopher Grant/
Supervisory Patent Examiner, Art Unit 2623